

## REMARKS

With the entry of this amendment, claims 2 to 12 remain in the application, claim 1 having been canceled. Each of the remaining claims have been amended to present the application in condition for immediate allowance.

More specifically, the Examiner stated in paragraph 9 on page 2 of the Office Action that claims 7 and 9 to 12 would be allowable if rewritten to overcome the rejections under 35 U.S.C. §112, first and second paragraphs. As discussed below, claims 7, 9, 10, and 11 have been rewritten in independent form, incorporating all the limitations of original claim 1 but modified to avoid the language noted by the Examiner in his rejections under 35 U.S.C. §112, first and second paragraphs. The remaining claims 2 to 6, 8 and 12 are either directly or indirectly dependent on claim 11 as amended. The rejections on the prior art are therefore moot since all the claims are now directed to allowable subject matter.

Claims 1 to 12 were rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement. Specifically, the Examiner states, that with regard to claim 1, the limitation “automatically adjusting a distance according to a level of privacy” is not described in the specification; that is, there is no disclosure which explains how the distance is adjusted “according to” a level of privacy, or relationship the “level of privacy” has to the distance.

Claims 1 to 12 were additionally rejected under 35 U.S.C. §112, second paragraph, as failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the Examiner states, again with regard to claim 1, the term “level of privacy” renders the claim indefinite, since the term is not defined by the claim or the specification.

The two rejections are related and will be treated together. As mentioned above, the term “level of privacy” has been avoided in the amended claims. The phrase used is “automatically adjusting a distance according to how clear a receiver can receive a corresponding signal from another party desired by individual users and a need of a collaborative project to have some shared information about individual user activities”, which finds support throughout the specification. On page 8, lines 22 to 28, there is the following explanation:

“The *distance* refers to how clear the receive can receive the corresponding signal of the other party. for example, in a video channel, the receiver may get a very clear video image or it may get a fuzzy image or it may only get the image after processing or the transmitting rate might be too high or low, etc. The task of this block [455] is to identify the *different degrees of clearness* of the video image transmitted and then assign to these different degrees a distance number.” (emphasis added)

The text goes on to say that the higher the distance number, the lower the quality of the signals transmitted through the channel. It was thought clear to the reader, and certainly to one of ordinary skill in the art, that the “different degrees of clearness” represented “levels of privacy”, as stated in the Summary of the Invention and recited in the claims as originally filed.

The Examiner will recognize that the balance of the specification goes into considerable detail on how this is all accomplished. First, there is described on page 8, with reference to Figure 6, an awareness network, which can be represented by an awareness matrix **A**:

$$\mathbf{A}(k) = \begin{bmatrix} a_{11}(k) & \dots & a_{1n}(k) \\ \vdots & \ddots & \vdots \\ a_{n1}(k) & \dots & a_{nn}(k) \end{bmatrix},$$

where  $a_{ij}(k)$  gives the value of the distance from user  $i$  to user  $j$  with respect to channel  $k$  for the awareness network. Here  $k$  can be any value from  $1 \dots m$ . When  $i=j$ , the value of  $a_{ii} = 0$ . Next, there is described on page 9 an ideal distance that an agent wants to provide to other agents, which is represented by matrix **S**:

$$\mathbf{S}(k,e) = \begin{bmatrix} s_{11}(k,e) & \dots & s_{1n}(k,e) \\ \vdots & \ddots & \vdots \\ s_{n1}(k,e) & \dots & s_{nn}(k,e) \end{bmatrix},$$

where  $s_{ij}(k,e)$  gives the value of the ideal distance that user  $i$  wants to provide to user  $j$  with respect to channel  $k$  for a given event  $e$ . Here  $k$  can be any value from  $1 \dots m$ . When  $i=j$ , the value of  $s_{ii} = 0$ . Again, on page 9, there is described an ideal distance that the organization wants, which is represented by matrix **G**:

$$\mathbf{G}(k) = \begin{bmatrix} g_{11}(k) & \cdots & g_{1n}(k) \\ \vdots & \ddots & \vdots \\ g_{n1}(k) & \cdots & g_{nn}(k) \end{bmatrix},$$

where  $g_{ij}(k)$  gives the value of the ideal distance that the organization wants user  $i$  to provide to user  $j$  with respect to channel  $k$ . Here  $k$  can be any value from  $1 \dots m$ . When  $i=j$ , the value of  $g_{ii} = 0$ . On page 10, there is described the ideal distance that the other agents want, which is represented by matrix  $\mathbf{O}$ :

$$\mathbf{O}(k) = \begin{bmatrix} o_{11}(k) & \cdots & o_{1n}(k) \\ \vdots & \ddots & \vdots \\ o_{n1}(k) & \cdots & o_{nn}(k) \end{bmatrix},$$

where  $o_{ij}(k)$  gives the value of the ideal distance that the user  $j$  wants user  $i$  to provide to him with respect to channel  $k$ . Here  $k$  can be any value from  $1 \dots m$ . When  $i=j$ , the value of  $o_{ii} = 0$ . And again on page 10, there is described the ideal distance required by the given task, which is represented by matrix  $\mathbf{T}$ :

$$\mathbf{T}(k) = \begin{bmatrix} t_{11}(k) & \cdots & t_{1n}(k) \\ \vdots & \ddots & \vdots \\ t_{n1}(k) & \cdots & t_{nn}(k) \end{bmatrix},$$

where  $t_{ij}(k)$  gives the value of the ideal distance that the current task wants user  $i$  to provide to user  $j$  with respect to channel  $k$  for a given event  $e$ . Here  $k$  can be any value from  $1 \dots m$ . When  $i=j$ , the value of  $t_{ii} = 0$ .

These distances are represented in the claimed invention by an elastic spring model. So, for example as described on page 13, the spring constant that an agent want to provide to other agents is represented by matrix  $\mathbf{K\_S}$ :

$$\mathbf{K\_S}(k) = \begin{bmatrix} k_s_{11}(k) & \cdots & k_s_{1n}(k) \\ \vdots & \ddots & \vdots \\ k_s_{n1}(k) & \cdots & k_s_{nn}(k) \end{bmatrix},$$

where  $k\_s_{ij}(k)$  gives the user  $i$ 's spring constant for channel  $k$  from  $i$  to  $j$ . Here  $k$  can be any value from  $1...m$ . When  $i=j$ , the value of  $k\_s_{ii} = 0$ . Again on page 13, the spring constants that the organization want is represented by matrix **K\_G**:

$$\mathbf{K-G}(k) = \begin{bmatrix} k-g_{11}(k) & \cdots & k-g_{1n}(k) \\ \vdots & \ddots & \vdots \\ k-g_{n1}(k) & \cdots & k-g_{nn}(k) \end{bmatrix},$$

where  $k\_g_{ij}(k)$  gives the value of the constant for channel  $k$  from  $i$  to  $j$  with respect to the organization. Here  $k$  can be any value from  $1...m$ . When  $i=j$ , the value of  $k\_g_{ii} = 0$ . And continuing on page 13, the spring constants that the other agents want is represented by matrix **K\_O**:

$$\mathbf{K-O}(k) = \begin{bmatrix} k-o_{11}(k) & \cdots & k-o_{1n}(k) \\ \vdots & \ddots & \vdots \\ k-o_{n1}(k) & \cdots & k-o_{nn}(k) \end{bmatrix},$$

where  $k\_o_{ij}(k)$  gives the value of the spring constant for channel  $k$  with regard to the issue that user  $j$  want user  $i$  to provide to him. Here  $k$  can be any value from  $1...m$ . When  $i=j$ , the value of  $k\_o_{ii} = 0$ . On page 14, the spring constant with respect to the given task is represented by matrix **K\_T**:

$$\mathbf{K-T}(k) = \begin{bmatrix} k-t_{11}(k) & \cdots & k-t_{1n}(k) \\ \vdots & \ddots & \vdots \\ k-t_{n1}(k) & \cdots & k-t_{nn}(k) \end{bmatrix},$$

where  $k\_t_{ij}(k)$  gives the value of the spring constant for channel  $k$  from user  $i$  to user  $j$ . Here  $k$  can be any value from  $1...m$ . When  $i=j$ , the value of  $k\_t_{ii} = 0$ .

In addition, weight matrices are described which emphasize different factors for the various agents, organization, and tasks are described on pages 16 and 17 of the specification. The theory explaining this model is described in considerable detail beginning on pag 19 of the specification.

Thus, it should be clear from the above discussion and a review of the specification and accompanying drawings the claimed invention is, in fact, written

in a manner that is both enabling and definite. The phrase now used in independent claims 7, 9, 10, and 11 of "automatically adjusting a distance according to how clear a receiver can receive a corresponding signal from another party desired by individual users and a need of a collaborative project to have some shared information about individual user activities" is both well defined and enabled in the specification as filed. Therefore, the amended claims are believed to be in condition for immediate allowance.

In view of the foregoing, it is respectfully requested that the application be reconsidered, that claims 2 to 12 be allowed, and that the application be passed to issue.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

A provisional petition is hereby made for any extension of time necessary for the continued pendency during the life of this application. Please charge any fees for such provisional petition and any deficiencies in fees and credit any overpayment of fees to IBM's Deposit Account No. 50-0510.

Respectfully submitted,



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